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OPPOSITIONAL IDENTITIES AND RESOURCE PARTITIONING:  
DISTILLERY OWNERSHIP IN SCOTCH WHISKY, 1826–2009<sup>\*</sup>

David G. McKendrick  
Australian National University

Michael T. Hannan  
Stanford University

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## Abstract

We build on recent theory and research on the role of categories in resource partitioning. We analyze Scotch whisky making between 1826 and 2009, a case that seemed initially to fail to conform to the pattern of the beer industry now treated as prototypical. On close examination (both qualitative and quantitative), we find that high concentration in the center of the market is not sufficient to generate a partition. Rather we see a long delay between the heightening of concentration in the industry and the emergence of a cluster of peripheral producers that claim an identity in opposition to the dominant generalists. We explain the source of the delay as a function of the nature of the audience, which until recently did not regard conglomerate or foreign ownership of distilleries as an impediment to producing authentic whisky. Only when critics started to question how ownership of distilleries related to authenticity did the revival of the traditional form of ownership begin to occur. By analyzing entries of focused firms in the recent period, we find that widespread ownership of distilleries of diversified corporations (but not foreign ownership) supported the formation of more traditional types of whisky distillers. But endurance of identity-based resource partitioning might require development of a collective identity and collective strategy by producers. In the case we studied, each focused producer has an idiosyncratic identity, which may be insufficient to cause audiences to agree on a code that excludes the mainstream producers from membership in the new category and thereby maintain a partitioned market.

The reformulation of resource partitioning theory in terms of categorical identities by Carroll and Swaminathan (2000) was a major step forward in the study of categories and markets. Indeed the case of the “microbrewing” revolution—with its sharp and oppositional category code—has become a standard case for initial testing of alternative social cognitive formulations in the organization context. Persistence of a partition between dominant center-market organizations and clusters of organizations on the periphery of the market putatively depends on the audience coming to agreement on a label for the periphery clusters and on the meaning of the label. Moreover, the shared understanding about the peripheral firms must be such that the offerings of the dominant producers cannot substitute for those of the peripheral producers. More generally, an oppositional identity, especially if rooted in notions of authenticity, can offer strong protection to specialist peripheral producers and limit the expansion of dominant firms from the center to the periphery (Carroll and Swaminathan 2000; Carroll et al. 2002; Hannan, Pólos, and Carroll 2007; Pólos, Hannan, and Carroll 2010).

Getting agreement on an oppositional code (center versus periphery) requires that the audience pay attention to ownership relations, that they trace products back to the firms that control sourcing and production. When will an audience be likely to pay attention? Here the answer appears to depend on the particulars of the case. In cases such as organic and biodynamic production, knowing the detailed specifications of the product (e.g., chemical analysis of a bottle of wine) cannot by itself reveal whether the full codes of these production methods have been followed. Products cannot be certified in such cases. Producers can be certified. But such certification can inform the audience only if there is a visible tie between the producer and the product. Outside of formal certification, the issues are subtler. They generally involve conceptions of authenticity that refer to the producer’s intentions and orientations and to the methods used in production (Carroll and Wheaton (2009) provide a valuable overview of some main conceptions of authenticity; see also Kovács, Carroll, and Lehman (2013)). Our point is that concerns with authenticity make problematic the identity of the firm behind the product.

But when will such authenticity issues become salient? We think that homogeneity among dominant producers matters. When homogeneity among such producers is high, the contrast of that set from the rest

of the market is also high. This is especially true if concentration eliminates the middle of the size distribution of producers (Hannan et al. 2007; Pólos et al. 2010). Then the audience sees a homogeneous cluster of mass producers (e.g., giant industrial farms) and possibly one or more clusters of peripheral producers (family farms, urban farms, specialist suppliers to elite restaurants, and so forth). Given such great contrast between the clusters, it seems natural to label them differently and to associate very different meanings to the labels. It is then a small step to wonder if the competing products from these clusters can be interpreted in the same way. Are tomatoes grown hydroponically in vast greenhouses interchangeable with those produced by a family farm? If the answer is No, then how can one justify applying a common label? If two categories of producers claim the same label for their products, then both cannot be authentic to an audience member who thinks that these producers are not interchangeable. According to Negro et al. (2011) contestation over authenticity generally arises when producers in different categories claim the same label for their products. They document such a process in the case of the production of Barolo and Barbaresco wines, where both “traditional” and “modernist” producers each claimed to produce the true Barolos and Barbarescos. Our qualitative evidence shows that a similar process has been at work in whisky: the authenticity of single-malt whisky has become contested and the contestation focuses attention on the producers (the owners).

Given the strategic importance of the Carroll-Swaminathan analysis of microbrewing to the rapidly developing field of categories in markets, it is important to learn more about the mechanisms involved and about the scope of application of the argument. Why do some initial partitions become coded as cultural oppositions and others not? Under what conditions do such culturally coded partitions endure?

These are not easy questions to answer empirically. Learning about the cultural coding of producer segments demands close attention to the context, especially to the connection between producers and audiences. So efforts in addressing these questions will, for now at least, take the form of close study of a single context that has promise as what Merton (1973) called a strategic research site.

We offer one such investigation here. We analyze a case—production of Scotch whisky—chosen because (at the time that we began the study) it did not appear to conform the theoretical imagery of the

categorical version of resource partitioning theory. We saw some strong parallels to microbrewing in the US and the UK: sharp increases in market concentration and a resurgence of interest in “traditional” and “authentic” products, single-malt whisky. However, the understanding that emerged in the audience for microbrews held that the products of industrial producers were not authentic microbrews. In contrast the new audience for single-malt whisky regarded the products of the dominant conglomerate producers of blended whisky (and other kinds of drinks) as fully authentic.

So we set out to explain why the two cases differ. But as we collected data, we began to observe that a cluster of producers was emerging in close parallel to what we have seen with microbrewers. So we no longer see a failure of the whisky case to parallel the prototype case of brewing. Rather we see a long delay between the heightening of concentration in the industry and the emergence of a cluster of peripheral producers that claim an identity in opposition to the dominant conglomerate producers. We try to explain this delay in terms of differences in the composition of the audiences. But when we come to the recent resurgence, our analysis becomes (unexpectedly) a replication of the Carroll-Swaminathan result.

We offer both qualitative and quantitative evidence on the resurgence of concerns with identity and authenticity in response to the near-total domination of the production of an iconic product by global diversified firms. The qualitative evidence comes from study of documentary evidence on the industry and on individual producers and from interviews with enthusiasts in Scotland. The quantitative evidence comes from analysis of events of entry into the industry using a database compiled from industry encyclopedias, newspaper accounts, and histories of individual distilleries. The arrival of firms bearing the oppositional identity initiates a partition of the market. Therefore we focus on entries of firms exhibiting the traditional form of distillery ownership. (The density of such firms is, at the moment, too low to observe much of an effect on mortality.) Changes in the identities of entrants illuminate a critical aspect of resource partitioning.

## **1. CATEGORICAL IDENTITY, OWNERSHIP, AND PARTITIONING**

Carroll’s (1985) original theory of resource partitioning explains the interlocking dynamics of the rise of large producers in a market center and of the resurgence of small specialist organizations that exploit

peripheral regions of the resource space. A rise in market concentration resulting from scale-based competition drives partitioning. The rise to dominance of a few large-scale producers opens up resource space near the market center, which can be exploited by specialists on the periphery of the market. Peripheral producers can thrive by operating in segments where demand is too small to be exploited profitably by organizations that rely on scale economies or by offering customized products or services. Empirical support for the theory comes from diverse contexts, including brewing, newspapers, feature films, banking, automobiles, auditing, and wine making (Carroll, Dobrev, and Swaminathan 2002).

Scotch-whisky making has experienced three shakeouts, followed by periods of new entry. But resource partitioning appears to have occurred only recently. Why not earlier? After the first shakeout ended in 1870, market concentration was extremely low and remained so until another peak in density was reached in 1901 (Figure 1). The industry was populated by small specialists, and thus the conditions for resource partitioning were not yet present. By contrast, the four decades from the mid-1930s, the end of the second shakeout, displayed conditions ripe for resource partitioning. Output per distillery grew 15-fold in the 1950s and 1960s, giving producers far greater scale economies (Craig 1994; The Scotch Whisky Association 2011). In addition, concentration of distillery ownership was high—between 54 and 62 percent of all distilleries were owned by four firms—and by all accounts the industry was dominated by large-scale producers (Hume and Moss 2000; Morrice 1983).

[Figure 1 about here]

We presume that this produced some resource release outside the center of the market. Yet, only six focused specialists entered during the 30-year period. None tried to revive the single-malt category (as later producers have), or sought to position themselves in opposition to the dominant incumbents.

Following another shakeout, which ended in 1991, market concentration remained high—the four largest firms controlled between 54 and 62 percent of the market. But unlike the previous period, we now see the beginnings of partitioning. Eighteen focused specialists entered, either by building a new distillery or acquiring and refurbishing distilleries that had been closed by dominant producers.

In other words, market concentration in itself did not trigger partitioning. To explore the source of the delay, we need to explore how the *identities* of distillery owners become salient to the audience.

Perhaps the most common source of (external) identity of firms comes from their participation in product markets. Consumers, critics, regulators, and financial analysts typically classify firms based on what they make or offer. But enthusiasts sometimes classify producers by technology, location, form of ownership, or employment relations and practices; and these enthusiasts sometimes shape the views of broader audiences (Negro, Hannan, and Rao 2011).

For identity-based partitioning to occur, audiences must perceive the producers in an emerging cluster to be similar to each other and different from the existing producers, and they must attribute an identity to the members of the emerging clusters that clashes with that assigned to otherwise similar organizations (Hsu, Hannan, and Pólos 2011). Identity claims that contrast sharply with those of otherwise similar organizations are more likely to be visible to audiences. Baron (2004) argues that two dimensions of identity are especially salient: resonance and authenticity. Resonance refers to the extent to which identities “capture or activate powerful distinctions along social, ethnic, religious, economic, political, and cultural lines” (Baron 2004: 11). Authentic identities preclude “certain alternatives from consideration simply on the grounds that they would not be genuine or thinkable, even if they might be profitable” (Baron 2004: 14; see also Carroll and Wheaton 2009).

Consumers might prefer small artisanal producers to mass producers without basing their preferences on hedonic comparisons of products. For instance, Carroll and Swaminathan (2000) highlight the oppositional code of “microbrewer”—one that excluded mass brewers and thereby protected the niche of the microbrewers (see also Swaminathan 2001; Greve, Pozner, and Rao 2006; Pozner and Rao 2006).

Scotch-whisky production provides a compelling context to study the role of identity in resource partitioning. Like brewing, whisky production was initially artisanal and became dominated by a handful of large-scale industrial producers. By most accounts, increasing concentration caused product offerings to become homogeneous (Morrice 1983; Hills 2002; Jefford 2004). In each case, enthusiasts turned to more flavorful niche products (microbrew beer and single-malt whisky). Nonetheless whisky had not



followed the general pattern in that consolidation and market concentration did not initially activate the process. What accounts for the delay?

The relevant audience for most of the 20th century was foreign and not very knowledgeable about the producers. It did not sharply distinguish blended whisky (a mix of mostly neutral grain spirits and some malt whisky) and pure-malt whisky. Producers of any kind of Scotch whisky were full-fledged members of the category in the eyes of this audience. Strikingly, even the enthusiast audience had little awareness of (or interest in) the identities of the firms that owned and managed the distilleries that produced the elite single malts that they favored. This lack of awareness reflects, at least partly, the fact that the classification system for whisky was institutionalized around only the features of the product, excluding those of its producer. Although enthusiasts rejected mass-produced blended whiskies and embraced and promoted the revived “single malt” category, global multi-business companies did not face any obvious authenticity problems as producers of artisan single malts. Beer, of course, was also classified only by product features before the microbrewing revolution. So the difference between the two cases likely reflects differences in the relation of producers and audiences.

## **2. THE SETTING**

Scotch whisky is “originally, authentically and uniquely” made only from barley, water and peat in a traditional batch-process pot still (Daiches 1976: 13). What we know today as “single-malt whisky” is this authentic product, distilled at a single distillery. Yet today’s consumers associate the label “whisky” with “blended whisky,” a mixture of traditional malt whisky with grain whisky, the latter a generic spirit made from any cereal grain (corn, oats, rice, buckwheat, or rye) in a (continuous) patent still. This technology, introduced in the 1830s, produced spirit in less time at lower cost than the pot still (Lockhart 1959). Its sole purpose was to make an inexpensive neutral (i.e., relatively tasteless) spirit that, once mixed with malt whisky made in a pot still, toned down the taste of its more flavorful counterpart to make it more accessible to more consumers.

At the beginning of the twentieth century, independent malt whisky distillers fought hard to prevent grain distillers and blending companies calling their product “whisky” since many blends contained just

10 percent malt whisky (Hume and Moss 2000). A Royal Commission was set up to decide the matter in 1909. It ruled that a spirit made from any cereal grains, not just barley, could be called whisky as long as it was produced in Scotland (Royal Commission 1909). As one blender testified:

In competition with “self-whiskeys” [i.e., malts], the proprietor of a blend starts with many manifest advantages. In Scotland there are 150 distilleries at work, and not only do the products of these different distilleries vary one from another, but in different seasons the make of each distillery may vary owing to difference in the quality of the malt. Hence as self-whiskeys the products of these different distilleries only appeal to the palates of a limited number of consumers. In the blend, on the other hand, these differences are minimized, if not entirely nullified. The blender may purchase and mix together the product of so many different distilleries, that he gets rid of the pronounced flavor of any particular whiskey. He is thus enabled to put on the market year by year a blended whiskey of almost unvarying uniformity of character. The pronounced flavour of each individual whiskey suits the taste of comparatively limited number of consumers, whereas the blend, especially in England and the Colonies, appeals to a very much larger number (Royal Commission, Final Report 1909: 20).

As the demand for blends rose, the blending houses acquired existing distilleries and constructed others. The most dominant company in the industry, the Distillers Company Ltd. acquired the five largest blending firms and controlled over 40 distilleries by the end of the 1920s (Weir 1995). As of the mid-1970s, DCL was still responsible for about 6 of every 10 bottles of Scotch whisky sold (Daiches 1976).

Global diversified firms began to enter in the 1930s, beginning with the Canadian drinks companies Hiram Walker-Gooderham & Worts and Seagram (Weir 1995: 279). America’s National Distillers Products entered in 1937. The trend toward non-Scottish ownership accelerated after the Second World War. Schenley Industries, an American distiller, pharmaceutical, and chemical company, entered in 1956, and Publicker Industries, an American producer of liquor and industrial chemicals, entered in 1965.

The proliferation of foreign entrants gradually reduced DCL’s dominant position (Weir 1995: 279). Foreign owners came from Ireland (the Guinness group), Japan (Takaro Shuzo, Nikka Whisky Distilling,

and Suntory), France (Pernod Ricard, Cointreau), Italy (Campari), India (United Breweries), Spain (Pedro Domecq), and the United States (Fortune Brands). The denouement came in 1986 when the Irish brewer Guinness acquired DCL, leaving only a few Scottish distillery owners. The amalgamation of Guinness with Grand Metropolitan Hotels in 1997 created Diageo, the world's largest drinks company.

*The Revival of Bottled Single Malts.* As in brewing, consolidation and an increasing homogeneity of branded products led to the revival of traditional more flavorful products. In the late 1950s and 1960s, some enthusiasts reacted against the small proportion of malt whisky in blends and the disappearance of bottled single malts.<sup>1</sup> Glenfiddich, generally recognized as the pioneer in reinvigorating the single-malt category, introduced bottles of its single malt in the mid-1960s. Thereafter came Glenmorangie, Glen Grant, Glenlivet, and Glendronach (Morrice 1983; *Scotch Whisky Review* 2003).

The first book to include tasting notes (*Malt Whisky Almanac*) and the first magazine devoted to Scotch whisky were both published in 1986 (MacLean 2003), and Michael Jackson wrote the first of his highly influential books that reviewed single-malt whiskies in 1987 (Jackson 1987). These publications educated an emerging audience to appreciate malt whisky's distinctive character. In 1983 a group of enthusiasts in Scotland formed the Scotch Malt Whisky Society and pioneered the bottling of malt whisky from single casks they purchased from distilleries (Sharp 2002). Producers of bottled single malt began to feature new dimensions on their labels (vintage, type of cask). Worldwide sales of bottled single malt reached close to 10% of the market for Scotch whisky in 2000.

The dominant producers were late to appreciate the potential of the emerging category. Once they did, they designated one or a few of their distilleries as single-malt brands—underscoring the history and unique character of their distilleries—and deployed specialized marketing divisions to this new market. Their strategy succeeded to such an extent that nearly all of the celebrated single malts have been produced by distilleries owned by the dominant branded-beverage companies.

### **3. EXTERNAL AUDIENCES: FOREIGNERS AND ENTHUSIASTS**

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<sup>1</sup> Reports indicate that a bottled malt whisky would occasionally be seen in the windows of wine merchants in Scotland, and a couple of Scottish wine and spirit merchants bottled a number of malt whiskies (Daiches 1976), but few were advertised.

In sociological perspective, an organization's identity is given by an audience (Zuckerman 1999; Hsu and Hannan 2005; Hannan, Pólos, and Carroll 2007). Audience structure affects consensus formation and corresponding processes of identity formation and interaction (Hannan, Pólos, and Carroll 2007). Pontikes (2012), for instance, shows that classification of an organization depends on which audiences are evaluating it. She distinguishes between audiences whose members are "market takers," such as consumers, and "market makers," who are interested in redefining market structure. Although she identifies venture capitalists as market makers, critics and enthusiasts can also be so considered as they begin to promote labels associated with new niche markets. A label affiliation that appeals to market-takers can be less appealing to market makers.

If the relevant audience for a category have conflicting views about its meaning, confusion and categorical tension might emerge and spark the emergence of a new category in opposition to the prevailing one (Carroll and Swaminathan 2000). In Scotch whisky, two audiences were central in shaping category boundaries: foreign consumers and enthusiasts. Although they attended to different product offerings—the former to blended whisky, the latter to single-malt whisky—both accepted the same set of producers as members of a single organization form.

The export market became larger than the home trade for the first time in the industry's history in 1937 (Weir 1995: 253). Through 1976 exports were directed mainly at America where demand was strong. Although there were hundreds of blends on offer, marketing there focused on 15 leading brands of which four had about 50 percent of all sales in the 1960s (Moss 1990). Since then industry growth has continued to be driven by foreign demand, increasingly in emerging markets.

Enthusiasts can be both market takers and market makers. Some take category boundaries as given and evaluate products according to accepted criteria. Others are more receptive to—and even promote—new types of classification (White 1981; Porac, Thomas, Wilson, Paton, and Kanfer 1995; Rao 1998). In comparison with most foreign audiences, enthusiasts in Scotland focused squarely on the malt-whisky category. Nonetheless enthusiasts were slow to contrast specialist producers with those engaged in more

diversified activities. Instead, their commitment and attention were directed at the product and distillery, not its form of organization.

Without independent bottlers, the reemergence of single malt whisky might not have occurred (Felten 2008). For over a century, distillers had sold surplus whisky to brokers. Some Scottish merchants, the most famous being William Cadenhead and Gordon & MacPhail, bottled this whisky as single malts under their own names and with the distillery's name on the label (Daiches 1976). These bottlings were almost the only way enthusiasts could acquire malt whisky from a single distillery since few distillers bottled their own product. This gave the merchants and bottlers status among enthusiasts, who often made pilgrimages to their shops to acquire unique bottlings.

The number of independent bottlers grew from 10 in the late 1970s and 20 a decade later to more than 60 in 2005. Some had accumulated casks from distilleries that had closed and were the only source of new bottlings. They also helped to develop enthusiast tastes. Taken together, they offered a large variety of single malts and pioneered additional product dimensions, which included dates of distillation and bottling, types of wood used, and other features not available from official distillery bottlings.

*Economies of Scope and Unconstraining Identities.* The dominant drinks companies and conglomerates responded to the success of the new single malts by producing their own bottled malts. When they did so, they had two advantages: economies of scope and unconstraining identities. Resource-partitioning theory holds that as concentration rises, dominant center producers will be unable to secure the free resources previously controlled by losers in competition in the center due to the high costs of covering these regions. But “if there are economies of scope between the market center and the peripheral regions of the resource space, then the process will operate differently” (Carroll, Dobrev, and Swaminathan 2002: 33 n. 12). Indeed, economies of scope of the big incumbents appeared to deter specialist entry once the big players offered a range of malt whiskies.

Even if few technical barriers constrain the winners from expanding into thin resource pockets on the periphery, social barriers to niche expansion—such as identity claims—can potentially enable entrants with a distinctive identity to partition the market. But such identity claims were also slow to emerge in the

case of Scotch whisky. As was the case with American brewing before the microbrew revolution, the category was defined only in terms of product features. But while the audience for brewing came to accept an oppositional code attached to a new label (“microbrewer”), whisky audiences—including enthusiasts—continued to use a single label to refer to *all* producers of Scotch whisky.

#### **4. PRODUCER IDENTITIES: FOREIGNERS AND CONGLOMERATES**

Two kinds of owners sparked the re-emergence of a traditional organizational identity as authentic in the case of Scotch whisky: foreign corporations and multi-business firms. Both types reflect the distinctions that audiences often make across a range of contexts.

*Foreign Ownership and Cultural Resonance.* Multinational firms operate in fragmented and often heterogeneous external environments, and complex internal ones (Kostova and Roth 2002; Kostova and Zaheer 1999). Their identities might thus conflict with local codes or with their own organizational codes (if they seek to adapt locally). Multinational firms cannot completely control how their identities are perceived or constructed, making it difficult for them to manage inconsistent identities across prevailing or emerging logics.

Cultural critiques of globalization often claim that multinational corporations undermine local cultural practices. As carriers of consumerism and bland uniformity, often of an American kind, multinationals threaten variety and uniqueness (Holton 2000). Their market dominance is often said to come at the expense of distinctive local cultures, arousing anxiety and, occasionally, social protest.

Globalization can trigger the reemergence of dormant or unengaged local identities. The increasing prevalence of foreign firms in culturally sensitive markets can prompt local critics to question their legitimacy. Foreignness creates a potential fault line between distinct organizational identities, spurring social movements to assert cultural significance and claim the sense of belonging to a particular place and amplifying the significance of oppositional identities produced by globalization (Tomlinson 2003). In response to globalization, local social actors “generate what they wish to protect” (Wherry 2006: 8). Witness the geographical-indicator status (provenance) achieved by a wide range of products in response to globalization (Raustiala and Munzer 2007), including wine (e.g., France’s Appellations d’Origine

Contrôlée), cheese (e.g., Parmigiano-Reggiano, Swaledale), seafood (e.g., Arbroath Smokie), agricultural products (e.g., lentils du Puy), even tools (e.g., Coimbatore wet grinder).

Something similar has begun in Scotch whisky. In belated recognition of heavy foreign ownership, whisky enthusiasts began to complain about their dominance. Writing of the Guinness acquisition of DCL, Rosie (2002: 51–52) declares that “[t]he giant of the Scotch whisky industry was lost to Scottish control.” Some enthusiasts began to wonder how Scot was Scotch, noting that whisky has become “as much a part of the ‘branch factory economy’ as the offshore oil industry or the electronics firms of ‘Silicon Glen’” (Rosie 2002: 52–53). Daiches (2002: 93) remarks that “the whole structure of the industry is now a network of interlocking financial and industrial interests, with Canadian, American, French, and Japanese firms involved.” One newspaper wrote, “Along with the brands has gone the ownership of the entire whisky businesses, leaving Scotland’s distilleries as hollowed-out sub-contractors” (*The Guardian*, February 2, 2009). Others declared that, like absentee landlords, “extra-territorial owners” are unlikely to feel any ultimate responsibility for Scottish communities (*Argyll News*, July 29, 2009). One critic says, “The industry is very happy to exploit the Scottish-ness of their product but when it suits them they are also happy to move the value added part of the industry, packaging and bottling, out of the country” (Lyons 2009).

Some specialist distillers also began to emphasize the semantic structure of opposing forms, underscoring their spatial fixity vis-à-vis foreign companies. Bruichladdich distillery, for instance, stresses that it operates only on the Scottish island of Islay and under Scottish management. Its managing director claims it is “part of our strategy to be 100 percent Scottish in every area of production,” to use Scottish organic barley, bottling on site with local spring water, building its own cooperage, and maturing the whisky on Islay (*Off Licence News*, March 12, 2004). According to the distillery’s manager, “What’s great is that everything happens here; we don’t have a remote headquarters in Shanghai or something. We’re in control of the whole process, from production to packaging” (*Off Licence News*, May 27, 2005).

These voices were joined by others asserting whisky’s cultural importance to Scottish identity. Ruminating about whisky in 1935, Neil Gunn (1977: 93), prominent novelist and social critic and

touchstone for some contemporary enthusiasts, wrote, “If I appear to be fighting hard for whisky and its Celtic background, it is because I believe I have a good cause and a noble drink.” Others have followed his lead in emphasizing malt whisky’s national character. Phillip Hills, nationalist and co-founder of the Scotch Malt Whisky Society, asked how “the Scottish nation” had allowed “its finest drink to disappear” for generations. He attributed the reemergence of single-malt whisky, in part, to “the revival of Scottish self-confidence” and the rise of “political nationalism” (Hills 2002: 27).

Foreign ownership plausibly makes authenticity problematic even when the controlling firm specializes in the whisky business and therefore likely gets viewed as committed to the broad product category. We propose that the increasing prevalence of foreign ownership sparks contestation of authenticity, which makes the resource space more complex. Opportunities arise for new entrants to assert oppositional identities rooted in Scot identity. This argument motivates our first hypothesis:

*Hypothesis 1: An increase in the number of foreign corporations that own Scotch distilleries increases (with some delay) the hazard of entry of firms with the traditional form of distillery ownership.*

*Concentration of Ownership Type and Homogeneity of Offerings.* A key mechanism in Carroll’s (1985) resource partitioning theory is the concentration of the market by a few generalist firms. We argue that dominance in a market by a particular type of *owner*—generalist multi-business firms in this case—also contributes to partitioning. It does so by generating homogeneity in product offerings, which in turn gives opportunities to new specialists emphasizing authenticity and variety in styles of offerings

Organizational diversity affects product offerings. In music recording and brewing, product diversity declined with increasing industry consolidation and generalist dominance (Peterson and Berger 1975 1996; Alexander 1996; Carroll and Swaminathan 2000). An identity-based explanation for resource partitioning suggests that matching offerings to emerging or changing audience needs occurs through the arrival of new organizations that introduce offerings that reflect emerging identities.

Diversified firms typically manage their operations in a category differently than do focused producers. They engage different market categories, make decisions based on portfolio and scope



considerations, sometimes share activities across lines of business, and make competitive comparisons with similar reference groups. Products within a category generally become homogenized as multi-business firms come to dominate. Research on strategic groups suggests that similar organizations offer products with similar intrinsic appeal (Porac and Thomas 1990; Rosa, Porac, Runser–Spanjol, and Saxon 1999). Rivalry runs stronger among firms within a category than between companies in different categories. Such firms orient themselves toward each other, require similar resources, adopt similar routines, and make similar offerings (Porac et al. 1995; Gimeno et al. 2006).

The beverage conglomerates emphasized the consistency in their offerings. If they owned multiple distilleries, they sought to optimize the performance of the overall product portfolio rather than any individual product. This often involved closing or “mothballing” distilleries that did not fit their portfolios to reduce capacity or to avoid competition with the offerings of their other distilleries, thereby reducing the variety of whisky on the market.

The diversified drinks companies also focused their attention on competitors within their reference group and were more likely to match competitor offerings in their own portfolios (Lopes 2007). Seagram, for instance, introduced a cheaper and lighter whisky brand called 100 Pipers to go head-to-head against Cutty Sark and J&B Rare (Pacult 2004: 232). These firms also sought to differentiate their offerings through brand names, advertising, bottle shape, price, and color rather than by taste, because the tastes of blends were more similar than were the tastes between any blend and any single malt (Morgan and Moss 1993).

Beverage groups also evaluated and managed their whisky offerings with reference to the potential competition from other spirits categories. As a Diageo executive explained,

If we don't succeed at selling Scotch, then our competitors will come in and take our place. Our biggest competitor is rum. More importantly, dark rum is growing at the rate single malts used to grow. If we don't move into that space we might wake up one morning and find that an estate-bottled rum, which is a direct copy of the single malt model, has beaten us to it. (Lyons 2003)

Although scale and scope economies of multi-business firms can provide advantages, these might prove to be disadvantageous once audiences recognize alternative organizational identities as opposing the dominant organizing form. When that occurs, sharing activities across categories generally constrains the ability of a particular business unit to engage audiences or customers in the best way (Hannan et al. 2007; Hsu, Hannan, and Pólos 2011). Efforts to achieve scope economies can reduce the appeal of an offering, as when duplicate or overlapping operations or resources are sold or withdrawn, while the buying and selling of assets can disrupt operations across categories and reduce the actual appeal of a firm's offerings. Moreover, with partial memberships in different business categories, their operating units in each category would likely be perceived differently than other single-business organizations in the same category (Zuckerman 1999; Hsu, Hannan, and Koçak 2009).

The extent of product homogeneity was revealed most clearly when distillery ownership changed hands. Enthusiasts began to recognize that offerings changed character when ownership passed from a diversified firm to a focused whisky maker. A leading whisky enthusiast wrote "The folk who made the whisky knew what was the best stuff; the astonishing thing is that many of the folk who owned distilleries did not" (Hills 2002). The new entrants and new owners sought to appeal to a different audience with products that emphasized characteristics that the multi-business firms ignored. The change in ownership allowed product variety to expand. As described by Jefford (2004: 182–183),

Whenever a distillery passes out of the ownership of a large corporation and resumes independence, malt whisky distillers are asking themselves why they should spend all year, every year, producing just one type of whisky when only a lack of imagination stops them from distilling softly peaty spirit, vigorous peaty spirit, robust spirit, spicy spirit or elegant spirit.

Among those buying distilleries from generalists, the new owners introduced whisky types or "expressions" that were either new or had been absent from the market for many years. Emblematic was the experience of Bruichladdich distillery, of Islay, which Fortune Brands had closed in 1995. Five years later local entrepreneurs acquired it and introduced a light malt, which was atypical among Islay whiskies (Jefford 2004). More important, lying in the warehouses throughout Fortune Brands' ownership were

whiskies of superb quality that Fortune Brands did not know what to do with. “Bruichladdich did not suit its brand marketing strategy; even though its malt had more intrinsic quality and interest than the placid spirit of the isle of Jura” (Jefford 2004: 184), the other island distillery it owned. Bruichladdich’s new owners also promoted a different image of the distillery, by seeking to make it a more integrated and visible part of the local economy. Its owners saw their mission as fighting against “the bombardment and standardization of our drinks industry” (Moore 2004) and “an overwhelming blandness” (Elson 2004). They experimented with different strains of barley and wanted customers to “be able to tell from the bottle’s label where the specific barley was grown. Authenticity is everything” (Rivans 2008: 114). Bruichladdich also opened its own cooperage and bottling line. One of the owners said, “We want to take it back to the historical way of distilling. You’d harvest in August or September, then get ready to malt in late Autumn or winter. Distilling will take place in the spring” (Jefford 2004: 373).

In parallel with developments in other parts of modern society (Carroll and Wheaton 2010), whisky audiences have increasingly sought authenticity in products and producers. As with foreign ownership, the power of diversified firms began to generate an undercurrent of criticism. Some critics began to volubly link the distillery with the parent firm and to question the relevance of the historic identity of the distilleries owned by generalists. The critics complained that conglomerates hawked brands instead of offering distinctive products. Says the manager of an independent whisky company, “The people who own the distilleries don't want people to know that the product is part of a major conglomerate, kept here only because of the fact that the distillery has to be located here to make Scotch” (Fraser 2001).

In calling for new definitions of authentic whisky, some enthusiasts argued that distillers should take “a satisfying step backwards” (Jefford 2004: 70) by reintroducing local malting, local cask storage, local barley sourcing, local cooperage, local bottling, and so forth. In this way, new categories arise from social-movement actions that frame distinctions between opposing organizational codes.

Although their malt-whisky distilleries still employ traditional distilling techniques, diversified owners have also come under criticism for how they organize production to achieve economies in supply,

storage, and bottling across product lines. Consider how Jefford (2004: 240–241) views the offerings of Diageo-owned Caol Ila, an old and venerable Islay distillery:

... the place and circumstances of its ageing matter enormously. Caol Ila's packaging makes great play of the fact that this 'hidden malt' is an 'Islay single malt whisky' and that it is 'highly prized among devotees of the Islay style.' It does not seem fair to market a spirit in this way which has only ever spent a fortnight on Islay. It would certainly not be beyond the resources of the mighty Diageo to build enough warehousing locally to house the relatively small amounts of Caol Ila it is likely to sell under the distillery name. This is a simple question of honesty, regardless of whether or not passing 18 years on Islay would produce a different result than passing 18 years near Alloa (on the mainland).

According to one critic, "The return to home-spun artisan values is partly a reaction from true aficionados to the large conglomerates which dominate much of the drinks sector" (Bath 2009). A founder of a new farm distillery thinks "it is time whisky-making got back to its artisan origins, back to a time where farmers would distill their spare barley in the byre. He wants the practice to reconnect with the land, to take the process out of the hands of the conglomerates" (Bath 2009).

Perhaps the most dramatic evidence of a revival of tradition involves the re-emergence of new "farm distilleries." The independent Kilchoman Distillery, which opened on Islay in 2005, grows and malts barley on its farm, grinds, mashes, and brews it, distills whisky on site, matures it in casks on the farm, and bottles the whisky on Islay. As the founder explained,

[I] realised there was a market for a specialist product, something like a premium ale. There was no point in building another distillery like they have here [on Islay]. So I warmed to this idea of the distillery, a bit like a microbrewery, where we would grow everything here. All the raw materials would be provided on the land. Even the peat would be sourced from Islay" (Tierney 2008).

The family-founders of Daftmill Distillery, a pioneering farm distillery on the Scottish mainland, built the facility in their farmyard. They rely on barley grown at their own Daftmill farm and water drawn from

their own artesian wells as basic ingredients. Both Kilchoman and Daftmill are redefining whisky making as a normal routine of a farming community.

As we argued for foreign ownership, growing concentration of distilleries in the hands of diversified owners can spark the expressions of authentic identities in opposition to them. Such oppositions generally take the form of authenticity challenges, contests over what is an authentic offering in the category (Negro, Hannan, and Rao 2011). These challenges usually begin with dissident producers, critics, and highly enthusiastic members of the audience. They can eventually become broadcast more widely and come to shape perceptions in the wider audience. These developments signal that the situation is propitious for the entry of producers that can make unassailable claims to authenticity. Therefore, we propose that the increasing concentration of ownership of distilleries in the hands of diversified firms will eventually spark an inflow of specialist producers.

The foregoing argument also implies that concentrated ownership by diversified firms matters, as in the general account of resource partitioning. Indeed the proliferation of diversified owners would have much less impact on the diversity of product offerings and on the perceived authenticity of the single-malt category if the number of producers with different kinds of owners (independent distillers, merchants, whisky blenders) grew apace. The processes driving the onset of partitioning in this case depend on the distribution of types of owners. Thus our central argument holds that concentrated distillery ownership by beverage groups and diversified firms makes product offerings more homogenous and the authenticity of the category more contentious, which in turn opens up the resource space for new kinds of products competing along different dimensions.

*Hypothesis 2: Greater concentration of ownership of distilleries by beverage groups and diversified firms increases (with some delay) the hazard of entry of firms with the traditional form of distillery ownership.*

*Why the Re-Emergence of the Traditional Form of Ownership Is Fragile.* Although we think we see the generation of partitioning based on the emergence of oppositional identities, it is too soon to conclude that

it can be sustained. As Hannan et al. (2007: 227) point out, “[t]he rise of such an identity can stabilize the partitioning” so long as the audience preserves the opposition. Some argue that specialists must develop a collective strategy to sustain an oppositional identity (Pozner and Rao 2006; Weber et al. 2008). In this sense, membership in the new category should be reinforced by a strategic deployment of identities that exclude conglomerate and foreign owners from the category. American microbrewers codified such differences. The Institute of Brewing Studies and the Association of Brewers (the major associations for craft brewers and home brewers) developed and relied on organizational classifications of brewing firms rather than products. For instance, to be classified as a microbrewer, a producer could make no more than 15,000 barrels of beers per year (Carroll and Swaminathan 2000).

By contrast, oppositional identities in Scotch whisky remain idiosyncratic. New focused producers have not formed a separate association to develop a classification system based on organizational size or other attributes, leaving the Scotch Whisky Association (dominated by the major producers) as the industry’s representative. While focused producers have displayed credible signals of authenticity, they have not taken a collective approach to differentiation. Some emphasized farm-based differences (Daftmill and Kilchoman), others ancient practices (Loch Ewe and Abhainn Dearg), local maturation and bottling (Bruichladdich), smallness (Tullibardine and Bladnoch) or experimentation in product offerings (Isle of Arran). Without explicit coordination, and strong group identification, these specialists might not cohere into an organizational form.

## **5. RESEARCH DESIGN AND MEASUREMENT**

We gathered data on whisky distilleries and their owners from a number of sources, beginning with *The Scotch Whisky Industry Record* (Craig 1994), generally recognized as the most comprehensive record for the mid-18<sup>th</sup> century to 1993. This compilation updated information first published by Moss and Hume (1981) to reflect many corrections and additions received from members of the industry and enthusiasts. Moss and Hume (2000) updated the information from their earlier book in a second edition. Books on the distilleries of Campbeltown (Stirk 2005) and the Hebrides (Wilson 1985), as well as of abandoned distilleries (Townsend 2000), provided additional historical detail.

We also conducted exhaustive searches of the digital archives of Scottish and English press and British parliamentary publications covering the 18<sup>th</sup>, 19<sup>th</sup>, and 20<sup>th</sup> centuries. Searches using distillery and distiller names filled in gaps in the record, including more precise entry and exit dates and information about whether distillers participated in additional lines of business. Especially valuable were *The Times* (London) (1785–1985), *The Scotsman* (1823–1950), *Glasgow Herald* (1800–1900), *Caledonian Mercury* (1800–1900), and *Aberdeen Journal*, later *Aberdeen Weekly Journal*, (1800–1900).

Comprehensive web searches of distillery and distiller names often turned up additional information from records kept and posted by Scottish towns, estates, and families. For more recent years, we updated the data through Factiva searches of newspapers and the monitoring of enthusiast websites such as MaltManiacs.org and ScotchWhisky.net. We also located rich information about the larger Scottish blending, beverage, and merchant houses in the Archives at Glasgow University. This effort produced data on 822 distilleries. We lack reliable information about entries before 1826. Therefore we analyze entries for the period 1826–2009. We count 714 entries during this period.

We concentrate on cases in which a new or existing distillery, not controlled by a focused owner, comes under the ownership of owner whose only business is malt-whisky production. These events include (1) building a new distillery, (2) acquiring a distillery that was previously owned by an owner with a more diverse set of industrial activities, or (3) taking a so-called “mothballed” distillery back into production. (This definition excludes from the count of new focused owners cases in which ownership transfers from one focused owner to another, because this does not change the prevalence of the traditional form.) We observe 268 focused entries during 1826–2009.

To test Hypothesis 1 about the effects of foreign ownership, we use *Number of foreign owners* based on the location of the headquarters locations. We interact these counts with a dummy variable for the 1946–2009 period to capture the recent partitioning process. We also add the *Number of non-Scot UK owners* (England, Wales, Northern Ireland) as a control.

For types of ownership, we coded each owner as (1) *focused* (a traditional distiller, which included farmers in the 19<sup>th</sup> century), (2) a *blender* (a distiller that also offered its own blend), (3) a *merchant* (a

distiller that was also engaged in trading and retail), (4) a *beverage producer* (a distiller that also made other alcoholic drinks—in the 19<sup>th</sup> century this was primarily beer, in the late 20<sup>th</sup> century this category was composed primarily of spirits groups), or (5) *diversified* (a distiller also engaged in additional activities outside of the aforementioned).

For our analysis of foundings we combined types (4) and (5), beverage producer and diversified firm, to get at the ownership dynamics in the period after World War II. In almost all cases, diversified owners of distilleries in the late 20<sup>th</sup> century were also large spirits producers, and they were mostly identified as such in the minds of enthusiasts. Spirits groups were often called conglomerates even when they concentrated on alcoholic beverages. Many spirits groups had bought and sold other assets while maintaining alcoholic beverages as their primary business. For instance, Diageo owned Burger King for a short period, and we coded Diageo as diversified during the time of its ownership. Critics often labeled Diageo a conglomerate even when it was only diversified across different spirits brands. As this example suggests, it does not seem to us to reflect accurately the distinctions made by relevant audiences to have separate counts for these two kinds of owners. For this reason we constructed a count that combines spirit-group owners and diversified owners. As with foreign ownership, we interact this variable with a dummy variable for 1946–2009.

Before we turn to analysis of entries, we briefly show that that the focused-owner type became tightly linked with the label “malt whisky,” that the language in the audience reflected the distinctions we make. We searched in Factiva for news articles during 1985–2010 that contained a producer’s name, a producer’s name plus “whisky,” and a producer’s name plus the nested “malt whisky.” Then, slightly adapting the approach developed by Pontikes (2010), we calculate each producer’s grade of membership in the “whisky” category as the proportion of the articles that mention the firm that also mention “whisky” and similarly the grade of membership in “malt-whisky” as the proportion of all articles mentioning the producer that also mention “malt whisky.” We see in Table 1 that the focused producers were never mentioned without a mention of “malt whisky.” The members of this type have a grade of membership of one in this label. At the other extreme, the conglomerate owners are usually mentioned,



unsurprisingly, in contexts other than “whisky.” The intermediate owner types have considerably high grade of membership in “whisky” than in “malt whisky.” This pattern conforms to the view that the re-emergence of focused owners resulted in a high-contrast (sub)category.

[Tables 1 and 2 about here]

To test Hypothesis 2 about the effects of ownership homogeneity, we use a measure of *Concentration of ownership by type*, a Simpson index of concentration of the shares of distilleries controlled by each category of ownership: focused whisky maker, blender, merchant, beverage producer, beverage group/diversified, and other (usually financial institutions).

We also use a number of controls: *Concentration of distillery ownership* measures the proportion of all distilleries owned by the four companies with the most distilleries, *Number of focused distillers*, *Growth (ratio) of GDP*, the *Number of operating distilleries* (which excludes mothballed distilleries) and two time periods, *Period 1914–1945* (to control for the two world wars and the Great Depression) and *Period 1946–2009*. Correlations of key variables can be found in Table 2.

The outcome is the hazard of entry of focused owners based on analysis of yearly counts. We use Poisson regression. (Likelihood-ratio tests reveal that one cannot reject the null hypothesis that these data are not overdispersed.) We estimate effects on the hazard using maximum likelihood.

## 6. RESULTS

For the scenario we examine, the trend in the raw data should be highly informative. We pointed to the appearance of two new farm distilleries in recent years. But systematic records of changes in patterns of ownership are needed to tell whether the predicted identity-based partitioning has begun. Our data reveal that the predicted resurgence does indeed appear to have begun. After more than a century of near-zero levels of creation of instances of the traditional ownership form, an upturn has taken place in the recent period. Only 22 cases of new focused ownership occurred during the 20<sup>th</sup> century, roughly one in five years. But, 15 such events have occurred during the decade 2000-2009, ten of them during 2005–2009. We regard this result as our central finding.

Table 3 reports estimates of three specifications. The first includes controls and the counts of owners broken down by location of the headquarters of distillery owners (non-Scot UK and foreign). The second specification adds an effect of the concentration of distillery ownership by type of owner, a main effect and an interaction with the most recent period (1946–2009 ). The third replaces the interaction of concentration by type of owner and period with a different interaction effect with period: proportion of distillery owners in the categories beverage group, diversified, and other. We use this specification to learn whether the entry process has been especially sensitive to the proliferation of these forms of ownership.

With each specification we estimate an overall effect of the theoretically relevant covariates and an effect for 1946–2009 period. We introduce this temporal interaction based on the historical accounts that reveal that identity processes seem not to have been activated until sometime after 1945.

[Table 3 about here]

Comparison of model fits shows that the specifications that take the distribution of ownerships into account, models 2 and 3, fit much better than model 1, which excludes the effects of form of ownership; these differences in fit are highly significant. However, there is no appreciable difference in fits for models 2 and 3.

First consider the issue of the geography of ownership. We do not find support for Hypothesis 1. The number of foreign owners has a positive effect overall on the hazard of entry and an additional positive effect in the recent period. However, neither effect is statistically significant. The number of non-Scot UK owners nor the number of foreign owners has a significant negative effect on the hazard of entry of focused owners during the post-war period, opposite the prediction of Hypothesis 1. We think that the failure of this hypothesis to find support might be due to the erratic trajectory of number of foreign owners in the post-war period, as can be seen in Figure 2. The numbers are small; and a single merger can shift the number appreciably. Perhaps the picture is just too erratic for our analyses to reproduce what we see in the qualitative evidence.

[Figure 2 about here]

Hypothesis 2 does receive support from our analysis of the archival data. To wit, the concentration of distillery ownership by type of owner has a negative and significant overall effect but a positive and significant effect for the post-war period (model 2). The latter effect dominates, so the net effect of concentration in the recent period is positive. Given the numerical dominance of conglomerate owners during this period, a high level of ownership-type concentration in that period means that ownership was concentrated in the least-traditional form: diversified owners including spirits groups. The positive effect of concentration on the hazard of entry of focused owners, then, suggests that extensive ownership of distilleries by the non-traditional type sparked an identity-based reaction.

Model 3 expresses the hypothesized effect in another way: an effect of the proportion of distillery owners in the least authentic categories: beverage groups, diverse, and “other” during the post-war period. This effect is positive and highly significant. So Hypothesis 2 receives support from both specifications.

We explored specifications that involve specific delays in responses. However, we found that lagging the effects of the key covariates by one year, two years, three years, or five years worsened model fits. This does not mean that there is no delay in responses of entrepreneurs to the identity-based developments. Rather it likely means that there is no consistency in the delay over the period.

## **7. DISCUSSION**

What have we learned from analysis of the case of whisky? First, high concentration in the center of the market is not sufficient to generate a partition. Such concentration does, as the original theory states, open space for possible entrants in the parts of the periphery that were formerly controlled by failed larger-scale producers. In Carroll’s original theory, these spaces opened due to the failure of center-market producers. In the current version proposed by Hannan et al. (2007), concentration in the center lowers the life chances of near-center producers, those whose niches partially intersect the center and partly intersect the periphery. A resulting increase in the hazard of mortality of the near-center producers creates a competitive release on the periphery (Negro, Swaminathan, and Visentin 2012). But only when a cluster of producers arises on the periphery does it become likely that audience members (perhaps following

enthusiasts) will label the peripheral players differently and associate a meaning with the label that differs sharply from the meaning of the old label.

Emergence of such a cluster was much slower in the whisky case than in American brewing. Perhaps this is due to the fact that the early enthusiasts of microbrewing were largely home-brewers. Home brewing, inexpensive and fairly undemanding technically, had been made legal in a number of states. Such home distilling is and was illegal in Scotland; indeed the government imposes a minimum production capacity on producers in order that excise taxes can be more easily applied and collected. In our view, the transition from home brewing to organizing a microbrewery or brewpub is much smaller than from no involvement in whisky making to opening (or re-opening) a distillery. However, this difference in itself would not explain such a long delay in response to competitive release in the whisky case.

We have emphasized that the retention by conglomerates of the historical distilleries as producers of single malt whisky made it especially hard for the audience to see appreciable differences between the malts than came from distilleries owned and operate by Diageo or Pernod Ricard and those made by independent distillers or offered by independent bottlers. We have emphasized that the fact that most of the relevant consumer audience for whisky was located far from Scotland compounded the problem.

In the whisky case, we think that the most important dimension of concentration is by form of ownership. In beer brewing, the growing industrial-scale brewing took place in giant modern facilities. But, as we have already noted, conglomerate owners kept many of the historic pot-still distilleries in the countryside. (More than a hundred distilleries now operate in Scotland.) So concentration of production in whisky is less relevant than concentration of ownership of distilleries by form. We argued and showed empirically that low diversity of form of ownership caused by the control of most distilleries by beverage group/conglomerate owners seems to have sparked the categorically coded partitioning. We also argued that that concentration of distilleries in the hands of foreign conglomerates would have a similar effect. Although the documentary evidence is consistent with this view, our analysis of entries of focused owners does not confirm it.

Although we have emphasized the implications of our argument and findings for the case of whisky, we think that the implications run broadly for the understanding of resource partitioning processes. We began by stressing the importance of authenticity concerns for the creation of oppositional codes. And we argued that such concerns require tracing from products back to the organizations that produce them. This allows properties of the producer organization that are seemingly unrelated to the production of the product—such as form of ownership—to become a salient and resonant basis for the construction and maintenance of oppositional codes.

A coded partition characterizes the shared understandings of the audience. For a culturally coded partition to endure, these understandings must persist. Such cultural persistence likely depends on actions by producers and enthusiast audiences. Carroll and Swaminathan (2000) show that the oppositional code was kept alive largely through the efforts of microbrewers and enthusiasts to “out” the dubious claims of authenticity by mass brewers and contract brewers. So endurance of an identity-based resource partitioning might require development of a collective identity and collective strategy by producers (Pozner and Rao 2006; Weber et al. 2008). In the case we studied, each focused producer has an idiosyncratic identity. While idiosyncrasy might sustain individual producers, a welter of idiosyncrasy will hardly induce audiences to agree on a code that excludes the mainstream producers from membership in the new category and thereby maintains a partitioned market. Sharing observed organizational similarities, such as size or market focus, is not enough (see also Fiol and Romanelli 2012). Such organizations might need to behave and identify as members of a group. This observation points to the importance of tying partitioning to social movement processes.

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TABLE 1. AVERAGE GRADES OF MEMBERSHIP IN “WHISKY” AND “MALT WHISKY” BY OWNERSHIP TYPE, 1985-2010.

	Type of Owner				
	Focused	Merchant	Blender	Beverage group	Diverse
GoM in “Whisky”	1.0	0.76	0.55	0.33	0.10
GoM in “Malt Whisky”	1.0	0.39	0.28	0.15	0.10

TABLE 2. CORRELATIONS OF KEY VARIABLES

Focused entries	1						
Growth rate in GNP	-0.21	1					
Concentration of ownership	-0.31	0.35	1				
No. of distilleries	0.52	-0.19	-0.68	1			
No. of focused distilleries	0.50	-0.34	-0.88	0.78	1		
No. UK owners	-0.25	0.15	0.32	-0.05	-0.54	1	
No. foreign owners	-0.16	0.41	0.77	-0.46	-0.71	0.21	1
Concentration by form of owner	0.25	0.06	-0.10	0.09	0.37	-0.69	0.22

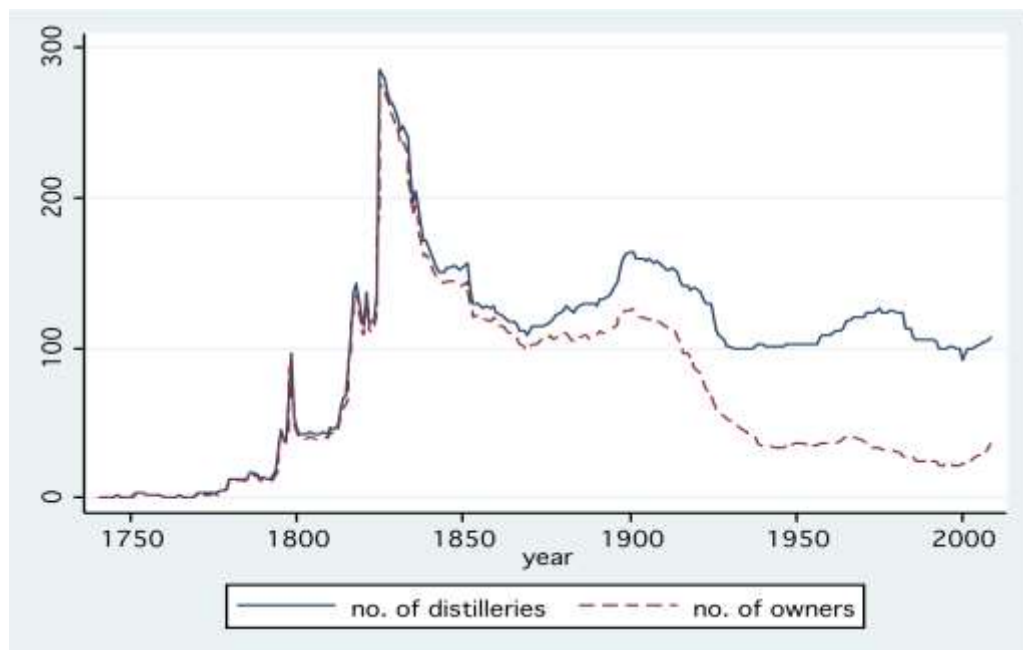
TABLE 3. EFFECTS OF PATTERNS OF OWNERSHIP OF DISTILLERIES ON ENTRIES OF NEW INDEPENDENT OWNERS IN THE SCOTCH WHISKY INDUSTRY, 1826–2009 (ML ESTIMATES OF POISSON REGRESSION MODELS)

Covariates	Model 1		Model 2		Model 3	
	Coef.	S.E.	Coef.	S.E.	Coef.	S.E.
Constant	0.329	2.24	6.05*	3.05	6.68*	3.01
Period 1914–1945	−0.458	0.881	0.523	0.957	0.618	0.954
Period 1946–2009	3.28	1.85	−0.290	2.30	−5.73	3.49
Growth (ratio) of GDP	−2.05	2.05	1.30	2.06	−1.20	2.06
Concentration of distillery ownership	−1.90	3.23	−4.15	3.87	−4.42	3.90
Number of operating distilleries	−0.014	0.014	−0.044*	0.018	−0.046*	0.018
Number of focused distillers	0.031**	0.014	0.074***	0.022	0.078***	0.021
Number of non-Scot UK owners	0.291**	0.120	0.144	0.126	0.130	0.125
Number of non-Scot UK owners x P1946–2009	−0.600***	0.180	−0.399	0.205	−0.416*	0.206
Number of foreign owners	−0.477	0.328	−0.500	0.373	−0.509	0.379
Number of foreign owners x P1946–2009	0.644	0.332	0.625	0.371	0.576	0.377
Concentration of ownership by type			−9.74**	3.39	−10.5***	3.33
Concentration of ownership by type x P1946–2009			12.1*	4.74		
Prop. bev, diverse, other owners x P1946–2009					18.0***	6.23
Number of observations	177		177		177	
log-likelihood	−151.45		−147.31		−146.35	

\* p<.10; \*\* p<.05; \*\*\*p<.01 (two-tailed).



**FIGURE 1. NUMBER OF DISTILLERIES AND OWNERS BY YEAR, 1741–2009**



**FIGURE 2. NUMBER OF NON-SCOT UK AND FOREIGN OWNERS BY YEAR, 1826–2009**

